



COMcheck Software Version 3.9.3

Interior Lighting Compliance Certificate

2009 IECC

Section 1: Project Information

Project Type: **New Construction**
Project Title : WAS/Scum building

Construction Site:
City of Houston Dept of Public Works
5422 Randon Rd
Houston, TX

Owner/Agent:
City Of Houston Department of Public Works
North West Waste Water Treatment Plant
5422 Randon Rd.
Houston, TX

Designer/Contractor:
H. A. Forouzan, P.E.
Gupta & Associates Inc.
7322 Southwest freeway Suite 410
Houston, TX 77074
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hforouzan@gaiconsulting.com

Section 2: Interior Lighting and Power Calculation

A Area Category	B Floor Area (ft ²)	C Allowed Watts / ft ²	D Allowed Watts (B x C)
Workshop	192	1.4	269
Total Allowed Watts =			269

Section 3: Interior Lighting Fixture Schedule

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixtures	D Fixture Watt.	E (C X D)
Workshop (192 sq.ft.) LED 1: Other:	1	2	41.3	82.6
Total Proposed Watts =				83

Section 4: Requirements Checklist

Interior Lighting PASSES: Design 69% better than code.

Lighting Wattage:

- ☐ 1. Total proposed watts must be less than or equal to total allowed watts.

Allowed Watts	Proposed Watts	Complies
269	83	YES

Controls, Switching, and Wiring:

- ☐ 2. Daylight zones under skylights more than 15 feet from the perimeter have lighting controls separate from daylight zones adjacent to vertical fenestration.
- ☐ 3. Daylight zones have individual lighting controls independent from that of the general area lighting.

Exceptions:

- ☐ Contiguous daylight zones spanning no more than two orientations are allowed to be controlled by a single controlling device.
- ☐ Daylight spaces enclosed by walls or ceiling height partitions and containing two or fewer light fixtures are not required to have a separate switch for general area lighting.
- ☐ 4. Independent controls for each space (switch/occupancy sensor).

Exceptions:

- ☐ Areas designated as security or emergency areas that must be continuously illuminated.
- ☐ Lighting in stairways or corridors that are elements of the means of egress.
- ☐ 5. Master switch at entry to hotel/motel guest room.
- ☐ 6. Individual dwelling units separately metered.
- ☐ 7. Medical task lighting or art/history display lighting claimed to be exempt from compliance has a control device independent of the control of the nonexempt lighting.
- ☐ 8. Each space required to have a manual control also allows for reducing the connected lighting load by at least 50 percent by either controlling all luminaires, dual switching of alternate rows of luminaires, alternate luminaires, or alternate lamps, switching the middle lamp luminaires independently of other lamps, or switching each luminaire or each lamp.

Exceptions:

- ☐ Only one luminaire in space.
- ☐ An occupant-sensing device controls the area.
- ☐ The area is a corridor, storeroom, restroom, public lobby or sleeping unit.
- ☒ Areas that use less than 0.6 Watts/sq.ft. See Note 4
- ☐ 9. Automatic lighting shutoff control in buildings larger than 5,000 sq.ft.

Exceptions:

- ☒ Sleeping units, patient care areas; and spaces where automatic shutoff would endanger safety or security.
- ☐ 10. Photocell/astronomical time switch on exterior lights. See Note 4

Exceptions:

- ☐ Lighting intended for 24 hour use.
- ☐ 11. Tandem wired one-lamp and three-lamp ballasted luminaires (No single-lamp ballasts).

Exceptions:

- ☐ Electronic high-frequency ballasts; Luminaires on emergency circuits or with no available pair.

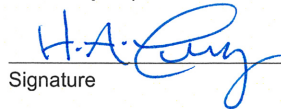
Section 5: Compliance Statement

Compliance Statement: The proposed lighting design represented in this document is consistent with the building plans, specifications and other calculations submitted with this permit application. The proposed lighting system has been designed to meet the 2009 IECC requirements in COMcheck Version 3.9.3 and to comply with the mandatory requirements in the Requirements Checklist.

H. A. Forouzan P. E.

Name - Title

Signature



Date

6/19/2014

Project Notes:

Project No. 14050054

1. The building is for Housing a Motor Control Center and industrial Process control equipment necessary to provide critical process control for waste water treatment. Only qualified electrical maintenance and process control personnel will be in the building.
2. COMcheck is primarily for Commercial and Light Industrial applications. The Building Area selected from the available choices and which closely relates to the lighting level required for working in the presence of Life Safety Issues (electrical maintenance and process control) is "WORKSHOP".
3. The building has (1) light switch at the entrance door which turns on (2) single lamp LED light fixtures.
4. Inside the building are life safety issues which prohibit dual switching (due to low light level) and no automatic shutoff features.
5. No exterior lighting required as existing area lighting is adequate.